

SPECIFICATION: The following paragraphs replace the correspondingly numbered paragraphs in the original application.

[0001] This invention relates to log handling tools for a fireplace. It is a unique tool, different from conventional fireplace tools such as tongs, hooks, or pokers. Each of these have their limitations in moving about a burning log and cause the user some difficulty. Tongs require moving parts that must be manipulated by the user to acquire and retain a grip while at the same time exerting force with both hands to lift and move the log. They are difficult to get between burning logs, and do not provide the user an adequate mechanism to grip and adequate leverage to lift a heavy log. Hooks are difficult to get between logs and have no mechanism to grip the log. They work best only in a pulling motion, making it difficult for the user to move a log rearward or upward in a fireplace. Conventional wedge or pointed tipped pokers only allow a log to be pushed about but not lifted.

[0002] Various types of log handling tools are known in the prior art. A typical example of such a log-handling tool is to be found in U.S. Pat. No. 3,042,438, issued to J. Turner on July 3, 1962. This patent discloses a fireplace tool including an elongated metal rod having a transverse leg at one end for manipulating a fireplace log. U.S. Pat. No. 3,310,331 issued to H. Michaud on Mar. 12, 1967, discloses a U-shaped hook having a D ring type handle for manipulating a log. U.S. Pat. No. 3,574,380, issued to R. Tague on Apr. 13, 1971, discloses a fireplace log-handling tool including two separate arms, each of which is manipulated by a user to engage opposite end faces of a log. Each of the arms terminates in a transverse leg having a pointed tip. U.S. Pat. No. 4,560,194 issued to T. Rybeck on Dec. 24, 1985, discloses a log-handling tool for mounting upon an axe-type handle. The tool includes a laterally extending hook member having an offset tip portion. U.S. Pat. No. 4,773,686, issued to

H. Michaud on Sept. 27, 1988, discloses a wood-handling hook having a tip including a set of flutes forming shoulders to enhance engagement of a log. U.S. Pat. No. 4,955,647 issued to H. Alfredson on Sept. 11, 1990 discloses a log-handling hook bent at 90 degrees. None of these devices uses a resilient, unary, v-shaped, the spring effect in an open-jawed mouth, and friction ridges within the mouth, to grip and lift a log, as does the current invention.

[0003] This invention overcomes problems of the prior art by allowing the user to conveniently completely lift and move about a burning log easily in any direction and release the log in any position, with adequate leverage. The log is held by the spring effect created when the of an open-jawed mouth, lined with friction ridges, joined to on the end of a long sturdy rod, is pushed onto a log. The tool is easy to use and has no moving parts. A user can grip a log with a single pushing motion, then lift and move the log in any direction without any need to manipulate moving parts or apply any force to retain the grip.

[0004] In view of known disadvantages in other types of log handling tools, this invention provides a substantial advancement in fireplace tools. When properly used, the open mouth is pressed onto a burning log. The elasticity of the resilient material of the unary, v-shaped, open-jawed mouth (typically iron or steel) ~~rod material~~ allows the mouth to be forced to open wider as it is pushed onto the log. The resilient, unary mouth exhibits a spring effect that resists the forced opening with progressively increasing forces on the sides of the log. The spring effect of the mouth, along with friction ridges inside the mouth, create friction sufficient to firmly grip a log, which may then be lifted, moved about in the fireplace, or completely removed from a fireplace. Unlike hooks, tongs, and conventional pokers, this tool provides a solid ~~adequate leverage and grip~~ on the log, and is easy to insert between logs. This tool may also be used to very

quickly grip and lift a burning log that rolls out of a fireplace. No other tool exists to handle this very difficult and urgent task.

[0009] ~~My~~ The applicant's invention is a fireplace tool to be used to grip, lift, reposition and release re-position, rotate, or completely lift and handle burning logs. A burning log is gripped lifted and re-positioned with this tool by placing the open-jawed mouth end of the tool near the center of the log and pushing the mouth firmly against the log. The open-jawed mouth is unary in that it is constructed of a single structural element, with no pivot points, joints or moving parts in the mouth (or the entire tool). Constructed of steel or a material with similar modulus of elasticity, the unary mouth acts as a v-shaped spring that resists the forced widening of the mouth's opening. Pushing the resilient, unary, v-shaped, open-jawed mouth over a fire log thus produces a spring effect, i.e., the sides of the mouth spring back against the log, and the ridges around the inner perimeter produce a pronounced friction effect. The combination of the spring effect and the friction effect cause the mouth to grip a log tightly, allowing a burning log to be conveniently lifted, moved about and released, without manipulating any levers, tongs or moving parts, so that the log is wedged into the mouth and the friction ridges bite into the wood. A The ¼ round, ½ round, or whole round log can be conveniently handled with this tool, is held by friction created by the spring effect and friction ridges in the mouth of the tool. Tapping the mouth of the tool against another log, the firebox, grate, dog irons, or any other solid object in the fireplace releases the log into position.

[00010] Figures 9 through 12 illustrate an example of use of the tool. The sequential numbering of the following description corresponds to the numbers shown in these figures.

1. The pointed tip of the one side of the mouth jaw is pushed under the log to be lifted.

2. The jaw mouth is pushed onto the log.
3. The force of the push causes the jaw mouth to open in a manner consistent with the elasticity of the tool material (e.g., steel). The force resisting the opening of the jaw mouth creates gripping force on the log, and the ridges within the jaw mouth enhance the grip, preventing the log from slipping out the open end of the jaw mouth.
4. The grip of the tool on the log allows the log to be lifted and moved freely.
5. The log is moved to a new position in the fireplace.
6. The pointed tip of the jaw mouth is tapped against an object in the fireplace to cause the jaw mouth to release the log.
7. The log is released into the new position.

[00012] This tool can be fabricated from made-of one solid piece of steel or other fire-resistant material with a similar modulus of elasticity, with a hand grip on one end, and on the other end the open-jawed mouth. In this one-piece construction of the tool, the open-jawed mouth is formed by a double bend in the rod (see Figure 1). The first bend turns the end of the rod back toward the handle grip 180 degrees or parallel to the rod. The second bend turns the rod end at an angle from parallel to the rod. In the construction of the invention (a working prototype) shown in Figure 1, that angle is 22 degrees. The most effective angle for a given construction will depend on the tool material used, the size of the rod, and the size of the mouth opening, which may be varied for different constructions. The construction of the tool shown in Figure 1 is made of a single piece of steel, metal or other material having appropriate elasticity (similar to steel) and properties to withstand the heat of a fire. Around the inner perimeter of the mouth of the tool are a series of ridges, the spacing of which may vary with different constructions. On the working prototype, the ridges are spaced approximately ¼ inch apart. These ridges, along with the spring effect of the mouth create the necessary friction to grip and lift logs.

[00013] In a one-piece construction of the tool, the exact location of the bends can be altered to change the size of the mouth opening. Using a prototype construction of the tool, the applicant has ~~I have~~ found that the dimensions shown in Figure 1 create a mouth opening that is a good size to lift logs of various sizes. The tip of the tool extends about 2 inches past the first bend and serves as a wedge to get between logs.

[00016] A friction grip fireplace tool comprising ~~comprised of~~ a rod or bar, having a hand grip on one end, and on the other end a resilient, unary, v-shaped ~~an open-jawed~~ mouth to grip, ~~and lift and~~ or re-position logs in a fireplace. There are no moving parts, no hinges, or pivot points. The tool can be made of one solid piece of steel or material with similar properties of elasticity and fire resistance or can be fabricated from two or more parts. ~~A~~The log is held in place by friction, created by ridges within the open-jawed mouth of the tool and the spring effect of the open-jawed mouth being forced onto a log. The spring effect of the tool's mouth along with the friction effect grip of the ridges allow most burning logs to be completely lifted, held, and moved about safely.